

Fact Sheet



For Draft/Proposed Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on January 22, 2013.

Permit Number: **R30-08300025-2013**
Application Received: **October 19, 2012**
Plant Identification Number: **03-54-083-00025**
Permittee: **Armstrong Hardwood Flooring Company**
Facility Name: **Beverly Mill**
Mailing Address: **P.O. Box 160, Beverly, WV 26253**

Permit Action Number: *SM01* Revised: *Draft/Proposed*

Physical Location: Beverly, Randolph County, West Virginia
UTM Coordinates: 597.41 km Easting • 4,296.88 km Northing • Zone 17
Directions: From Charleston take I-79 North to exit 99, proceed east on US Route 33 to Elkins. From Elkins take US Route 250 South. The facility is located approximately 1.6 miles south of Beverly in Randolph County.

Facility Description

The Beverly facility manufactures finished and unfinished hardwood flooring under Standard Industrial Classification (SIC) code 2426. Green lumber is purchased and stacked in the Mill Yard to facilitate air drying of the lumber. The lumber is then further dried in the steam heated pre-dryer and/or one of 38 lumber kilns. Kiln-dried lumber is transferred by one of three lumber tilts to the Mill rough end saws. The rough end saws cut the lumber into strips for transfer to one of six lines of knot saws, side matchers, and end matchers. The unfinished wood flooring is graded, stacked and either stored or transferred to one of two finishing lines. Finished hardwood flooring is graded and packaged for shipment to mill customers.

Boilers: The facility currently operates two wood fuel-fired boilers (each 48.8 MMBTU/hr) to provide steam for the drying kilns, the stain curing ovens, and the building heating system. A third propane-fired

boiler (96.7 MMBTU/hr) is used as backup for periods of shutdown of the wood fired boilers. Each of the wood-fired boilers (001-01 & 001-02) is equipped with 7,600 square feet of heat surface for generating steam from the combustion of wood waste. Sawdust and wood waste from the mill operations are collected in silos and burned as fuel. These boilers are designed to generate a maximum of 37,110 pounds of steam by burning a maximum of 6,445 pounds per hour of wood waste fuel. An electrostatic precipitator controls particulate matter emissions from the two wood fired boilers.

A 96.7 MMBTU/hr Propane gas fired boiler (001-03) and associated propane unloading station was installed in 2007. This boiler is limited to 400 hours of operation per year.

Flooring Mill: The flooring mill consists of six (6) lines where cutting, planing, and edging operations are performed to convert kiln-dried hardwood lumber into unfinished hardwood flooring. The kiln-dried lumber is fed to the rough end for preliminary sorting, cutting, and sizing and then to one of the six processing lines. The Flooring Mill also includes several hogs, three hogged fuel silos, and two truck loadouts for hogged fuel. The flooring mill is designed to convert 163,800,000 board-feet of kiln-dried lumber into 109,200,000 square feet of unfinished hardwood flooring per year. Particulate emissions are controlled by seven (7) baghouses (No.'s 2 through 8).

Finishing Lines: Unfinished hardwood flooring is supplied to two (2) Finishing Lines for sanding, staining, sealing, application of topcoat, and packaging for shipment. Each line contains a stain rollcoater unit with stain applicators and a two-zone, natural gas-fired high velocity stain cure oven; a sealer rollcoater unit with hooded roll applicators and UV cure oven; a hooded topcoat rollcoater and UV cure oven; and a two-stage hooded topcoat rollcoater. Each finishing line is designed to produce 59,600,000 square feet of finished hardwood flooring per year. Particulate emissions from the finishing lines are controlled by Baghouse No. 1.

Yard Operations: Yard operations consist of receiving green lumber to the pre-dryer and/or lumber kilns, and transfer of dried lumber from the lumber kilns to dry storage. The mill operates one steam-heated pre-dryer and 38 steam-heated lumber kilns to dry green lumber for further processing in the mill and finishing lines. The pre-dryer is designed for 1,600,000 board-feet per charge (charge cycle is approximately 35 days). Each of the 38 kilns is designed for 102,000 board-feet per charge (charge cycle normally averages 15 days). Rolling stock transport of lumber results in the generation of fugitive particulate matter emissions.

This significant modification (SM01) is to incorporate revised Sulfur dioxide emission limits for the No.1 and No.2 Wood-Fired Boilers in accordance with R13-1147N and consent order CO-R30-E-2012-18.

This Title V modification also includes the changes requested under minor modification (MM01). This minor modification is to install equipment to produce new “visual distressed flooring” products at the Beverly plant. The new line will be located in the Flooring Mill and will be designated Emission Unit ID No. 003-02. The new equipment will include planing, sanding, denibbing, and scuffing operations that will generate sawdust and be controlled by the existing Baghouse No. 5 (Control Device 007, Stack S07). In addition, a new stain application line will be installed and result in VOC emissions and products of combustion from a natural gas-fired curing oven. The exhaust stacks associated with the stain application and curing operations are designated Emission Point ID Nos. S29 through S32. The addition of the “visual distressed flooring” line was approved under R13-1147M on November 8, 2012.

Emissions Summary

The change in potential emissions associated with the significant modification (SM01) is as follows:

Pollutants	Change in Potential Emissions, TPY
SO ₂	+83.71

The changes in potential emissions associated with the minor modification (MM01) are as follows:

Pollutants	Change in Potential Emissions, TPY
PM	+0.01
PM ₁₀ /PM _{2.5}	+0.01
NO _x	+0.2
CO	+0.4
SO ₂	0
VOCs	+5.1

Title V Program Applicability Basis

This facility has the potential to emit over 100 tons per year of carbon monoxide (CO), nitrogen oxides (NO_x), and volatile organic compounds (VOCs). Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Armstrong Hardwood Flooring Company is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	Particulate matter from manufacturing source(s).
	45CSR13	Construction permit requirements.
	45CSR30	Operating permit requirement.

State Only: None

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-1147N	February 12, 2013	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

- This significant modification (SM01) increases the Sulfur dioxide emission limits for the No. 1 and No. 2 Wood-Fired Boilers in accordance with R13-1147N and consent order CO-R30-E-2012-18. The changes (from R13-1147N) incorporated in this permit are as follows:
 - Table 4.1.2 was changed to reflect the new, higher, SO₂ emissions.
 - Condition 4.4.7 was added.
- This significant modification also includes minor modification (MM01) which was received on August 21, 2012 for the addition of a new “visual distressed flooring” line. The new line will be subject to 45CSR7. However, the applicant requested no increase in the existing emission limit from Baghouse 5 (condition 5.1.1). Baghouse 5 has previously been determined to be in compliance with 45CSR7. The 45CSR7 requirements for Baghouse 5 were already included in the Title V permit.

The minor modification includes the following changes (from R13-1147M) in this permit:

- Emission Unit IDs-003-02, 003-02A, 003-02B, 003-02C, 003-02D have been added to the emission unit table.
- New condition 5.1.7 (emission limit for coating line) was added.
- New condition 5.1.8 (stains with a 0% vHAP content shall be used on the new line) was added.
- New condition 5.2.4 (coating record keeping requirement) was added.
- Due to the renumbering in R13-1147M and addition of boilerplate requirements, the citations for the following conditions were revised: 3.1.1, 3.1.10, 3.1.11, 3.4.1, 3.4.2, 3.4.3, 3.4.5, 3.4.6, 4.4.1, 4.4.2 and 4.4.3.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

Significant Modification:

40 CFR 60 Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The boilers are not subject to Subpart Dc because they were constructed before June 9, 1989. The SO₂ emission limit increase does not affect their applicability to 40CFR60 Subpart Dc.

Minor Modification:

40 CFR 63 Subpart QQQQ, “National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products,” would apply to the new line if the facility were a major source of HAPs. This facility is a synthetic minor source of HAPs. Therefore, Subpart QQQQ does not apply.

CAM applicability for significant modification: CAM applicability determinations for EU 001-01 and EU 001-02 were included in the Title V permit R30-08300025-2013 and Fact Sheet for the Beverly Mill. The increased SO₂ emission limits included in this significant modification does not change the CAM applicability for these emission units. The emission units at this station are not subject to CAM for SO₂ emissions because the Dry Esp (008) only controls particulate matter emissions. There are no SO₂ control devices for these boilers.

CAM applicability for minor modification: The only air pollution control device associated with the Visual Distressed Flooring Line is Baghouse No.5 which is already subject to CAM. Since the modification did not result in an increase to the particulate matter emission limit for this baghouse, no changes to the existing CAM plan or increase in the frequency of data collection under 40 CFR §64.3(b)(4) were required.

Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule.

The facility has not submitted any application for a PSD modification; therefore, the requirements of the GHG tailoring rule are non-applicable.

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: February 25, 2013
Ending Date: March 27, 2013

All written comments should be addressed to the following individual and office:

Beena Modi
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Beena Modi
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

(Choose) Not applicable.

OR

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.